**BEFORE**

**THE PUBLIC SERVICE COMMISSION OF**

**SOUTH CAROLINA**

**DOCKET NO. 2019-239-E – ORDER NO. 2019-___**

**December __, 2019**

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| IN RE: | Dominion Energy South Carolina, Incorporated's Request For Approval Of An Expanded Portfolio Of Demand Side Management Programs, And A Modified Demand Side Management Rate Rider | ) ) ) ) ) ) | **PROPOSED ORDER** |

## I. INTRODUCTION

On June 28, 2019, Dominion Energy South Carolina, Incorporated's ("DESC" or "the Company")[1] filed a Request for Approval of an Expanded Portfolio of Demand Side Management Programs and a Modified Demand Side Rate Rider. In its filing, DESC 1) submitted for review the results of its potential study ("the ICF Study") and demand reduction and energy efficiency program analysis (together, Demand Side Management or "DSM") programs for the Commission's review; 2) requested approval of its proposed suite of ten modified DSM programs for an extended five-year term with authorization to modify, expand, amend, terminate, or add any measure or program without prior Commission approval; and 3) petitioned the Commission for authorization to update its "Rider to Retail Rates – Demand Side Management Component" to provide for the recovery of the

[1] South Carolina Electric & Gas Company ("DESC") changed its name to Dominion Energy South Carolina, Inc. effective April 29, 2019. This Memorandum uses "DESC" or "the Company" to refer to the Company both before and after this name change.

Company's costs, net lost margin revenue, and shared savings incentive associated with its DSM programs. The six-year period approved by the Commission for the Company's current DSM programs expired on November 26, 2019. The Company requested that this docket be heard on a schedule that allowed its requested changes to be made effective December 1, 2019. At hearing, the parties consented to a Commission decision date after the November 26 expiration with the understanding that any approvals would be made retroactive to an effective date of December 1.

## II. FINDINGS OF FACT AND CONCLUSIONS OF LAW

a. The Company has historically achieved low savings relative to potential and should be delivering savings greater than 1%.

b. The ICF Study is not a true potential study, as it does not analyze technical, economic, and maximum achievable potential.

c. The Company's proposed offerings to historically underserved market sectors (low-income, moderate-income, multifamily, small business, new construction) are inadequate relative to potential and should be increased.

d. The Company's abilities to change programs over the five-year period should be subject to boundaries while allowing the Company reasonable flexibility.

e. The Company's existing 6% allocation of shared savings would not be sufficient to achieve exemplary performance, but is an adequate reward for mediocre performance; increases should be structured as a sliding scale with total annual sales as a denominator and a multiplier for programs targeting underserved sectors.

f. The Company should implement a lower barrier to entry in the rate rider for commercial and industrial accounts that have opted out.

g. The Company has failed to comply with Order No. 2018-322(A), and must do more to increase EE and DR programming to address winter peak as required by the Commission.

h. The Company must take into account the recommendations from Witness Chant's testimony and late-filed exhibit, discuss and reach consensus with the Advisory Group, and propose program portfolio revisions (programs) for PSC approval in a filing no later than June 30, 2020.

## III. EVIDENCE IN SUPPORT OF FINDINGS AND CONCLUSIONS

### a. The Company has historically achieved low savings relative to potential and should be delivering savings greater than 1%.

With nine years' program experience under its belt, the Company's DSM/EE programs should be mature and delivering savings levels over 1%. [Chant Dir., 6:1-3]. The Company "suggests achievable incremental annual savings under the expanded program scenario" of 0.7 percent in years 5 *and* 10.[2] [Chant Dir., 6:12-13; *see also* ICF Study, Table 12, page 25]. This estimate is calculated using a base which excludes forecasted sales from opt-out customers, which account for roughly 25% of the Company's total sales.[3] As Witness Chant testified, the American Council for an Energy-Efficiency Economy (ACEEE), which releases an annual State Energy Efficiency Scorecard, reported that in 2017, 23 states had already achieved savings at or above 0.7% of annual sales; 13 states had achieved savings at or above 1%; and 3 states had achieved savings greater than 2%.[4] [Chant Dir., 6:4-11].

Although the Commission applauds the Company's proposal to more than double its savings over the five-year period (from 0.3% in 2020 to 0.7% in 2024), the Commission finds that the doubling of a relatively low current savings level calculated using a base excluding ¼ of total sales is insufficient.

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2 ICF Study, Table 12; Chant Dir., 7:1-7 (The ICF Study projects "incremental annual savings in the expanded program scenario as reaching a new higher level of savings quite quickly [year 3], but then plateauing instead of continuing to expand").
3 ICF Study, page 25
4 American Council for an Energy-Efficient Economy, 2018 State Energy Efficiency Scorecard, December 2018 update, Table 8, page 28, https://aceee.org/research-report/u1808

b. **The ICF Study is not a true potential study, as it does not analyze technical, economic, and maximum achievable potential.**

The Company's proposal is based on a study it commissioned ICF to produce. [DESC Application, Ex. 1; Raftery Dir., 3:15-17]. Company witness and ICF employee Pickles authored the Study and testified about it for the Company. [Tr. 11:6-11]. Although the Company titles the study as a "potential study," it is not – in fact – a study of the full potential of energy efficiency in the Company's territory.

Potential studies traditionally first estimate a territory's "technical potential." This study, as Witness Pickles conceded, "was not designed to do [that], so it did not" [Tr. 83:12]. Potential studies then estimate the territory's economic potential. Witness Pickles also conceded the ICF Study does not do this. [Tr., 83:18]. Third, potential studies traditionally then estimate the maximum achievable potential. Witness Pickles again conceded the ICF Study "was not designed to do so." [Tr., 84:1].

The ICF Study nominally estimates what is "achievable," but on cross examination Witness Pickles conceded that the ICF Study does not even do that. Rather, as Witness Pickles testified, the ICF Study "established that this level of expenditure would be cost-effective at this level. It does not speak to increments over and above these amounts." [Tr., 86:23-87:1]. The ICF Study is not a true potential study. Rather than "defining the full maximum achievable potential of energy efficiency in its territory," the ICF Study models the Company's existing program and a program expansion scenario. [Chant Dir., 8:1-4].

As a result, the Commission finds, as Witnesses Pickles and Chant did, that the ICF Study does not identify the absolute ceiling of what is cost-effective and potential in the Company's service territory [Tr., 87:8-9; Chant Dir., 8:5-9], and should not be used in any future proceeding as representing the ceiling of potential energy efficiency savings available in the territory.[5]

### 1. Past performance

In describing its methodology, the ICF Study states: "The optimization varied the participation for each measure in a range based on the historical program performance and other variables used in estimating program participation."[6] Witness Chant explained that this is problematic because it "seems to predict future potential bounded by the constraints of past programming." Witness Chant emphasized the constant change present in the EE industry and noted her observation that high-performing programs do not allow past performance to bind assessment of future potential.[7] [Chant Dir., 8:13-17]. Citing a Report issued by the Regulatory Assistance Project ("RAP") on common pitfalls of potential studies, Witness Chant additionally lists "effective program design" and "strength of motivation on the part of the utility" as factors that can significantly influence the ultimate level of savings reached by a utility.[8] Like Witness Chant and the RAP Report, the Commission also finds that achievable savings projections should

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[5] Kramer, Chris, and Glenn Reed, "Ten Pitfalls of Potential Studies," Regulatory Assistance Project, 2012 (hereafter "RAP Report") ("too often 7 projections of achievable savings are seen as precise forecasts or even upper limits on 8
what level of demand reduction can be attained through energy efficiency initiatives.").

[6] ICF Study, page 25.

[7] Chant Dir., n7 ("In fact, high-performing programs establish goals or are challenged to have goals that push them past those historical barriers. In moving into its second five-year performance period, the District of Columbia Sustainable Energy Utility was required by the Department of Energy and Environment to dramatically increase savings with no prescription on how it would or even could be done. Sometimes that is the impetus needed to push programs to more and more effective and efficient levels of performance. Efficiency Vermont, as another example, has from its earliest years, defined programming in its planning that was intentionally designed to develop "new market initiatives" that would address technologies, program campaigns, and market conditions that may not be known at the time the plan was written.")

[8] RAP Report, page 5.

not necessarily be considered maximum limits, even if budgetary allocations cannot be increased.

**2. Payback acceptance curves**

In modeling program participation, the ICF Study "defines a series of 'payback curves,' which are used in modeling program participation, based on payback."[9] Witness Chant explained that while payback "is one metric that customers look at, it is not the only factor important to customer acceptance rates." [Chant Dir., 9:13-14]. The RAP Report similarly states: "Some studies model behavior using technology adoption curves, which generally assume that rates of consumer adoption are a function of simplified economic inputs, such as incentive levels and measure costs. Although these models can be informative, they often overlook additional key factors that can be more uncertain but equally important in influencing consumer choice."[10] Witness Chant notes that consumers make choices based on a "myriad of factors" beyond an economic analysis, and that this reality forms the basis of the behavioral programming becoming increasingly prevalent in the EE industry. [Chant Dir., 9:15-10:3].

Even if payback curves were as significant a factor as represented in the ICF Study, much of the payback curves the Company uses are dated and non-transparent. [Chant Dir., 10:4-5]. The Company cites six sources for payback curves, some dating back as far as 2006, and four of which are claimed proprietary to ICF with utility name and location withheld as confidential – preventing comparability.[11] [Chant Dir., 10:4-11]. The Commission finds, as Witness Chant did,

[9] ICF Study, Appendix C.
[10] RAP Report, page 7.
[11] Potential Study, Appendix C, Payback Acceptance Data Sources, pages 83-84. Citations include Commercial ICF survey of 231 non-residential customers in 2013 for a confidential utility; three references to Residential ICF survey of 300 residential customers in 2013 for a confidential utility; Energy Information Administration industrial data accessed in 2014, and a 2006 national survey of residential customers conducted by the Shelton Group.

that the ICF Study relies too heavily on customer payback curves in general, and the ones used are overly dated and the majority of their sources lack sufficient transparency to be deemed reliable, therefore they should not be used in any future proceeding as a predictor of customer behavior related to energy efficiency measures and incentives.

**3. Barriers that can be overcome to expand program potential**

Finally, as witness Chant testified, the ICF Study relies too heavily on program achievable potential, thereby restricting the analysis from appropriate consideration of the "full range of measures and efficiency programming initiatives that can drive and deliver effective energy efficiency in the future. [Chant Dir., 12-14]. Citing the RAP Report: "Potential studies frequently fail to consider certain technologies that may considerably reduce energy demand in future years. Other savings opportunities may be overlooked because they do not strictly fall into the category of distinct, installable measures… a study that only looks at the savings that can be achieved from basic measure installation may miss some or all of these types of savings opportunities, leading to an undervaluing of achievable savings."[12]

The Commission finds, as Witness Chant did, that the ICF Study overlooks several barriers that can be overcome to expand program potential, and the next potential study the Company produces must include an analysis of at least the overlooked programs or measures outlined by Witness Chant in her prefiled testimony and late-filed exhibit. [Chant Dir., 11:4-13:20; Hrg. Ex. 5].

c. **The Company's proposed offerings to historically underserved market sectors (low-income, moderate-income, multifamily, small business, new construction) are inadequate relative to potential and should be increased.**

[12] RAP Report, page 7.

As Witness Chant testified, South Carolina ties with North Carolina for 11th highest poverty rate in the country.[13] Consequently, South Carolinians have particularly high energy burdens[14] due to lower household income and some of the highest (average) residential electric bills in the contiguous U.S. – the highest in the South Atlantic Region,[15] as defined by the Energy Information Administration of the U.S. Department of Energy. [Chant Dir., 18:1-19:2].

Witness Raftery testified that "a primary focus of [the Company's] proposal is low- and moderate-income customers, as well as small businesses" and that the Company has developed EE programming specifically targeted at these groups. [Raftery Dir., 4:12-16, 6:10-12; Tr. 13:11-15]. While the Commission supports the Company's stated goal to increase its offerings to historically underserved markets, the proposed offerings are inadequate relative to potential, as testified to by Witness Chant, and should be increased.

**1. Low-income / Moderate-income**

In spite of DESC's praise of its Residential Neighborhood Energy Efficiency Program ("NEEP") for low-income customers and expressed hope to expand the program by roughly 35% over the next five years, the TRC scores for the Company's low-income programs rank 2nd highest of all the Company's programs. [Raftery Dir., 6:10-21; Chant Dir., 20:10-14]. This alone is evidence that the Company could greatly expand its offerings and invest more in this customer

[13] This is at 100 percent of the Federal Poverty Level (FPL), or $12,060 for a one-person household and $16,240 for a two-person household. The FPL is the same for all 48 contiguous states in the U.S. Approximately 33 percent of South Carolina households are at 200 percent of FPL ($24,120 for a one-person household; $32,480 for a two-person household).
[14] Energy burden is the percent of a household's annual income needed to pay household energy bills. It is annual household energy costs divided by annual household income. The average energy burden for lowincome households in the U.S. is approximately three times the average level for all households. (https://www.energy.gov/sites/prod/files/2019/01/f58/WIP-Energy-Burden_final.pdf).
[15] South Atlantic region for EIA includes Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia.

class. [Chant Dir., 20:11-13]. Witness Chant provided several recommendations, including measure list expansions, which "should provide a deeper average savings level." [Chant Dir., 20:10-22:10; 21:15-21].[16] To achieve deeper average savings levels where cost-effective, the Commission finds that the Company must discuss Witness Chant's recommendations with the Advisory Group and include proposed program portfolio revisions in a filing with the Commission no later than June 30, 2020. To expand program outreach and reduce barriers to eligibility, the Commission also finds that the Company must perform a modified analysis for its low-income offerings with lower income qualification thresholds as recommended by Witness Chant [Chant Dir., 22:1-10].

Although Witness Griffin testified that the NEEP benefits both low and moderate income customers, the Company offers no program or incentive designed solely to address the specific needs of moderate income customers [Chant Dir., 22:14-17], which Witness Griffin conceded on cross-examination. [Tr., 67:20-68:1; 6920-24]. Witness Chant provided several recommendations specifically targeting moderate-income customers, including significant rebate level increases and low-interest financing. [Chant Dir., 23:1-9]. To encourage more targeted efforts to meaningfully reduce the energy use of the moderate-income subsector [Chant Dir., 22:20-22], the Commission finds that the Company must discuss Witness Chant's recommendations with the Advisory Group and include proposed program portfolio revisions in a filing with the Commission no later than June 30, 2020.

### 2. Multifamily

[16] Measure list expansions provided by Witness Chant include: air sealing, duct sealing, attic insulation, reflective roof coating, programmable wi-fi thermostats; blower door testing, including duct blaster tests to guide air-sealing efforts; and incentives that encourage purchase of new, more efficient mobile homes.

Although the Company claims its proposal will include new service to customers in multifamily rental units [Raftery Dir., 7:2-3] and "align property owners and managers with tenants in a single program" [Tr., 29:5-6], the Company's Residential Multifamily Program focuses on "highly discounted energy efficiency upgrades in common areas" for property owners in exchange for "buildingwide participation of the tenants." [Tr., 29:7-9]. It is unclear what that means, but the evidence seems to show that it is a voluntary program. [Tr., 29:10-13 ("Tenants can also receive an energy consultation and energy efficiency upgrades at no cost.")].

Witness Chant provided recommendations for the Company to move into "this complex and historically underserved market," including "incentives for measures such as HVAC upgrades in residential units (especially if there is resistance electric heat), and insulation and air-sealing of multifamily buildings." [Chant Dir., 23:17-19]. To achieve deeper savings and increase access and affordability through long-term energy burden reductions [Chant Dir., 23:19-21], the Commission finds that that the Company must discuss Witness Chant's recommendations with the Advisory Group and include proposed program portfolio revisions in a filing with the Commission no later than June 30, 2020.

### 3. Small business

The Company aspires to increase participation in its small business direct install program by 75% [Raftery Dir., 6:22-23], increase the amount of current incentives offered [Griffin, Tr. 32:9-10], and "expand program resources to focus more on small businesses in rural areas or small towns" [Griffin, Tr., 32:7-9]. Although the Commission applauds the Company's desire to increase small business participation, the Commission finds that the Company's requirement that a business use less than 350 MWh per year to qualify as a "small business" is unduly restrictive. [Chant Dir., 24:12-15]. Witness Chant testified that Massachusetts, for example, caps its small business service qualification at 1,500 MWh per year, and it small business program has experienced significant savings.[17] [Chant Dir., 24:18-25:2]. The Commission agrees with Witness Chant that "[r]estrictive program rules can inhibit cost-effective savings." [Chant Dir., 25:2]. To enable more small businesses to participate while helping the Company achieve its participation goal, the Commission finds that that the Company shall adopt Witness Chant's recommendation that the Company's small business threshold be raised to "at least 1,000 MWh of annual use." [Chant Dir., 24:12-17].

**4. New construction**

The Company proposes no incentives or programs for new residential construction. At hearing, Counsel for the Company argued that the Company's focus on EE incentives for existing homes only is appropriate because of "the current high standards for new construction." [Tr. 13:18-20]. Witness Chant, however, testified about the phenomenon of lost opportunities, where housing developers and society are "locked out of savings for anywhere from 10 to 30 years, depending on the building system," when utilities do not prioritize EE upgrades for new construction or major rehabilitation. [Chant Dir., 23:22-24:4]. Witness Chant testified that utilities are increasingly adopting these types of programs and experiencing "excellent results, including cost-effective savings for the program provider and long-term savings for the housing provider and residents. [Chant Dir., 24:4-7]. Witness Chant provided recommendations for specific types of upgrades such a program should include: consideration of all building systems, including HVAC, the building envelope (including doors and windows), lighting, and appliances. Witness Chant also recommended that the Company take income eligibility barriers into account here as she also recommended for deeper savings achievement in the multifamily

[17] https://www.masssave.com/en/saving/business-rebates/

building sector. [Chant Dir., 24:10-11]. To avoid losing the opportunity to take advantage of savings only available at the time of new construction or major rehabilitation, the Commission finds that that the Company must discuss Witness Chant's recommendations with the Advisory Group and include proposed program portfolio revisions in a filing with the Commission no later than June 30, 2020.

d. **The Company's abilities to change programs over the five-year period should be subject to boundaries while allowing the Company reasonable flexibility.**

Witness Chant provided testimony describing ways in which this Commission could "ensure adequate regulatory oversight of [the Company's] programs while keeping the door open for the rapid innovation that is occurring in this industry." [Chant Dir., 25:11-27:9]. One model presented by Witness Chant is the NCUC-approved Program Flexibility Guidelines for the Duke Energy utilities, which "set parameters for program changes without the need for Commission approval." [Chant Dir., 25:11-24; Chant Dir., Ex. 1]. Witness Chant recommended that the Company be required to revise and resubmit its portfolio of EE and DR programs if and when any of the following occur: 1) implementation of federal EISA lighting standards are delayed or eliminated [Chant Dir., 26:1-8]; 2) AMI rollout creates the ability to design pilot programs or full market rollout of programs [Chant Dir., 9-10]; 3) new technologies emerge, such as advances in storage [Chant Dir., 26:15-20]; 4) new market models emerge for EE, DR or active demand management [Chant Dir., 26:21-27:9].

Witness Raftery testified that the Company has had to "reevaluate how to engage and incentivize customers to participate in cost-effective DSM programs" in light of the EISA lighting standards [Raftery Dir., 5:22-6:9]. Similarly, the Company should be required to revise and resubmit a proposed portfolio if EISA lighting standards are delayed or eliminated. Witness Raftery also testified that the Company's multi-year planned rollout of AMI will "support additional expansion" of DR programs [Raftery, Dir. 12:12-16], and that the ICF Study shows that with AMI in place, TOU and critical peak pricing rate measures could be cost effective, "[b]ut creating program plans for these measures would be premature at this time." [Raftery Dir., 13:1-4]. Company testimony supports the suggestion that the Company re-evaluate its portfolio once AMI is rolled out and propose changes to the Commission for approval – which the Company concedes will be required because TOU and critical peak pricing are rate-based programs. [Raftery Reb., 6:12-15]. As such, the Company should be required to revise and resubmit a proposed portfolio if and when it makes AMI available.

Because of the high likelihood that any of the above-referenced changes in circumstances will occur in the near future, the Commission finds that if and when that happens, the Commission or Intervenors should be allowed to initiate a publicly-filed, mid-term review of the Company's portfolio if the Company does not initiate one on its own within 120 days after being noticed by the Commission or Intervenors.

e. **The Company's existing 6% allocation of shared savings would not be sufficient to achieve exemplary performance, but is an adequate reward for mediocre performance; increases should be structured as a sliding scale with total annual sales as a denominator and a multiplier for programs targeting underserved sectors.**

DESC emphasizes its proposed doubling of spending on DSM going forward. [Raftery Dir., 5:7-9; Tr. 10:23-11:2; 11:21-23]. But actual savings should be the measure of incentive rather than mere spending. The Company argued that 11.5% is justified because it is consistent with the incentive levels the Commission allows for other utilities. [Raftery Dir., 14:13-15; Tr. 16:25-173]. The Company also argued that 11.5% is appropriate because it "provides a reasonable incentive to earnings to support the Company's dramatically increased investment in DSM programs." [Tr. 17:2-6].

Before determining the proper incentive level, the Commission finds a discussion of the statute is necessary. South Carolina law allows a utility such as the Company to recover from customer (1) the costs of the energy efficiency programs, (2) lost net margin revenue, (3) and certain incentives.[18] [Tr. 88:25 – 89:5]. The statute also expressly states that a utility's "net income" must be "at least as high as the net income would have been if the energy conservation measures had not been implemented"[19] [Raftery Dir., 14:9-11]. All parties concede, however, that the statute does not define "net income." [Pickles, 90:7-8; Evans, 200:24].

In light of the evidence and testimony in this case, the Commission finds a reasonable interpretation of "net income" is "electric revenues minus fuel costs and the variable operation and maintenance costs," as approved by ORS Witness Evans. [Evans, Tr., 201:3-4]. The Commission further finds that the Commission's role in preserving the utility's "net income" requires evaluation of two pieces.

First, the Commission must consider the reductions in demand charges and energy sales that occur as a result of customer participation in DSM programs [Tr. 202:11-21]. Second, ***if necessary***, the Commission must consider the capital costs plus return on equity on new generation that is a function of the energy efficiency programs. [Tr. 202:22-203:1].

If, however, there is no avoided new capital investment, the only thing necessary to preserve the utility's "net income" is the compensation for avoided demand and energy charges. [Tr., 203:5-8]. As such, absent any avoided new capital projects, awarding the net lost margin revenue is all that is necessary to comply with the statute regarding "net income" [Tr., 204:2]. Given that the Company's IRP shows no new capital projects until 2029 [Tr., 204:3-22], the DSM programs proposed here avoid no new capital expense. [Tr., 205:8]. Therefore, the shared

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[18] *See* S.C. Code Ann. § 58-37-20.
[19] *Id.*

savings incentive functions purely as that: an incentive. [Tr., 205:18]. The law does not ***require*** any incentive to preserve the utility's net income, much less does the law require a shared savings of 11.5%. Any shared savings is purely at the Commission's discretion.

In support of its proposal to increase the shared savings incentive to 11.5%, the Company argued that 11.5% is consistent with the incentive levels the Commission allows for other utilities. [Raftery Dir., 14:13-15; Tr. 16:25-17:3]. The Company also argued that 11.5% is appropriate because it "provides a reasonable incentive to earnings, to support the Company's dramatically increased investment in DSM programs." [Tr. 17:2-6].

With regard to the Company's argument that an 11.5% incentive is consistent with levels for other utilities, although Company witness Raftery declined to specify the utilities to which he referred, the Commission presumes that they are Duke Energy Carolinas ("DEC") and Duke Energy Progress ("DEP"), the only other electric utilities for which the Commission has established incentives for DSM. ORS witness Evans testified that forecasted annual energy savings from the Company's proposed expanded portfolio never exceed 0.7% of prior year sales, whereas DEC has reported energy savings of 0.96% of prior year sales, and DEP's has reported 1.50% energy savings as a percent of prior year sales. In light of the large discrepancy between DEC's and DEP's achieved savings and the Company's projected savings, the Commission is not persuaded by the Company's comparison to incentives awarded to other utilities.

Witness Chant testified that the Company's proposed shared savings percent of 11.5% is too high, given the comparatively low level of annual savings proposed by the Company, and would result in excessive compensation. [Chant Dir. 27:19, 28:8]. Witness Chant testified that she would tend to support a higher level of shared savings if it were conditioned on achieving more ambitious goals. [Chant Dir., 28:11-12]. Therefore, Witness Chant initially recommended a sliding scale sharing of the net benefits, which would be a function of the annual energy savings achieved, as set forth in the following table:

| **Annual incremental savings (as a percent of total annual sales)** | **Percent of NPV-Benefit to DESC** |
|---|---|
| 0.8% | 8% |
| 0.9% | 9% |
| 1.0% | 10% |
| 1.1% | 11% |
| 1.15% and greater | 11.5% |

[Chant Dir., 29:9] In support of her recommendation, Ms. Chant explained that a sliding scale provides motivation for the program administrator to push its performance to higher and higher levels, rather than stopping its efforts after meeting a minimum threshold. [Chant Dir., 29:10-12].[20] Witness Chant recommended that the incentive percentage be calculated based on a denominator of total retail sales. [Chant Dir., 30:11-3].

Witness Pickles critiqued Witness Chant's recommendation that the incentive only accrue when savings are at or beyond 0.8% of sales as "confiscatory and contrary to state law." [Pickles Dir., 28:12-13; Tr. 66] As explained above, state law does not guarantee any level of incentive. Accordingly, we reject this argument. In addition, although the Company emphasized its proposed doubling of spending on DSM going forward as a justification for a higher incentive, [Raftery Dir., 5:7-9; Tr. 10:23-11:2; 11:21-23], the Commission believes that a performance incentive should reward savings, not spending. However, to respond to the Company's concerns, and in response to a request from the Commission for a late-filed exhibit providing

[20] Witness Chant recommended that the incentive percentage be calculated based on a denominator of total retail sales. [Chant Dir. 30:11-3] Mr. Pickles implied in his testimony that sales to opt-out customers should be excluded from the denominator in calculating the savings achieved as a percentage of retail sales. [Pickles Reb. 28:10-11].

additional information regarding the use of a sliding scale in DSM incentive structures, Witness Chant modified her initial recommendation in order to provide an incentive to the Company even as programs are in the initial state of expansion, as set forth in the table below. [Hrg. Ex. 5, page 10].

| **Annual incremental savings (as a percent of total annual sales)** | **Percent of NPV-Benefit to DESC** |
|---|---|
| 0.5% | 5% |
| 0.6% | 6% |
| 0.7% | 7% |
| 0.8% | 8% |
| 0.9% | 9% |
| 1.0% | 10% |
| 1.1% | 11% |
| 1.15% and greater | 11.5% |

Witness Chant further recommended that to encourage performance in programs that serve low-income customers and address winter peak, additional credit be given to savings from those programs. Thus, savings from low-income programs be weighted at 150 percent (or, 50 percent more than actual); and (b) measures reducing or eliminating use of electric resistance heat be weighted at 150 percent to the degree those savings do not duplicate the low-income program savings. [Hrg. Ex. 5, page 10].

In light of the evidence, the Commission finds and concludes that increasing the Company's shared savings incentive to 11.5% of net benefits is not justified. Although the Company pointed to incentives provided to other utilities, the Commission finds that comparison unpersuasive given the much lower levels of savings projected by the Company compared to those of DEC and DEP. The Commission also finds and concludes that it is appropriate to award a higher percentage incentive as a reward for achieving higher levels of energy savings. For all of these reasons, the Commission concludes that the sliding scale incentive structure recommended by Witness Chant, as modified by her recommendations in Hearing Ex. 5, should be approved. Further, the incentive should be calculated based on a denominator of total annual sales, rather than sales net of opt-outs.

f. **The Company should implement a lower barrier to entry in the rate rider for commercial and industrial accounts that have opted out.**

Twenty-five percent of the Company's savings are unavailable due to commercial and industrial ("C&I") opt-outs, and none of the Company's potential estimates include these customers. [Chant Dir., 15:12-14]. Load growth is estimated at 18% over the 20-year period, evidencing an "urgent need to use all cost-effective means to reduce energy use in the State…" [Chant Dir., 16:2-4]. In light of the fact that there are currently no regulatory reporting systems to "ensure that companies that opt out are making cost-effective investments in EE or DR, and that savings from those investments are fully reported and independently verified," the Company should be doing more to improve its C&I programming to further incentivize these customers to opt back in. [Chant Dir., 16:5-12]. The Commission agrees with Witness Chant that "[t]he eroding of the C&I base has implications for all customers…" [Chant Dir., 31:3-6].

The Commission agrees with the Company and Witness Chant that reducing the number of years required for payment of the rider is appropriate. [Chant Dir., 30:23-25]. The Commission agrees with Witness Chant and finds that the Company can and should further reduce the number of years required, or structure its C&I opt-out program differently to incentivize these customers to opt back into the Company's EE programs. [Chant Dir., 30:23-31:6]. The Commission also finds that in its next potential study, the Company must present estimates and goals as a percentage of total sales (inclusive of opt-outs) in lieu of presenting sales net of C&I opt-outs.

The Commission agrees with Witness Chant that the Company should be concerned and making efforts and investments to bring some of the opted-out C&I customers back. [Chant Dir., 31:7-12]. Witness Chant testified, and the Company presented no compelling evidence to rebut, that "C&I customers perceive positively the technical assistance that the utility provides to reduce energy costs" and often value it even more than the financial incentives provided. [Chant Dir., 31:10-12; 32:3-7]. Witness Raftery testified that non-residential customers had been surveyed and provided input related to "program awareness, satisfaction, likelihood to participate, [and] barriers and drivers to energy efficiency." [Raftery Dir., 5:4-7]. On cross examination, however, when asked whether the Company actually learned from any of its C&I customers via survey or otherwise that lower barriers to entry were not important to them, Witness Griffin admitted that the Company had not. Witness Griffin also admitted on cross-examination that, contrary to her prefiled testimony [Griffin Reb., 8:21-23], no C&I customer that had opted out actually told the Company that it made "an informed business decision that they can efficiently and effectively implement energy savings on their own" – only that the customer had implemented its own EE measures. [Tr., 72:8-73:20].

To address the issue of barriers to C&I customer re-entry, Witness Chant recommended that the Company consider basing the length of mandatory rate rider participation on the level of incentive provided should the C&I customer opt back in and participate. The Commission finds that that the Company must discuss Witness Chant's recommendation with the Advisory Group and include related proposed program portfolio revisions in a filing with the Commission no later than June 30, 2020.

### g. The Company has failed to comply with Order No. 2018-322(A), and must do more to increase EE and DR programming to address winter peak as required by the Commission.

In Order No. 2018-322(A), this Commission noted that "it is imperative that the Company take all appropriate measures to aggressively pursue economic demand side management and energy efficiency programs, targeted at reducing the winter peak…"[21] The Company has requested that the Commission "find that DESC has met its obligations under Order No. 2018-322(A) to 'investigate and implement economic demand side management and energy efficiency programs with an emphasis on decreasing the newly developed winter peak…'" [Raftery Reb., 7:16-19].

Witness Raftery testified that the investigation related to winter peak reduction through DR and EE required of the Company by the Commission in 2018 "was performed as part of the ICF Study." [Raftery Dir., 10:22-11:2]. Witness Raftery argues that the ICF Study "adopted a number of broad-based DSM programs that reduce winter peak." [Raftery Reb., 3:1-2]. To support this argument, the Company relies most heavily on its proposal to include a replacement program for residential electric strip heating (with energy-efficient heat pumps). [Raftery Reb., 3:16-19]. The Company also cites its proposal to increase its incentives offered for high efficiency heating and cooling equipment as having a "major impact on winter peak.…" [Griffin, Tr., 29:25-30:12].

#### 1. The Company has not shown that its EE programs are sufficiently aggressive to constitute compliance with the Commission's Order

Counsel for the Company argued at hearing that the Company "evaluated hundreds of [EE] measures with the potential for doing so" and is "proposing to implement those measures that are economically justified." [Tr. 15:2-5]. Still, as Witness Chant testified, the Company's

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[21] Order No. 2018-322(A), Dkt. No. 2018-2-E, at 15 (May 2, 2018).

overall proposed effort for the five year period "remains significantly below the achievement levels that have been already attained by neighboring utilities and other utilities in similar climate zones." [Chant Dir., 33:18-21].

### 2. The Company has proposed no new DR programs

Witness Raftery testified that, in response to the Commission's 2018 Order and the ICF Study, the Company has no plans to implement any new DR programs over the five year period. [Raftery Dir., 11:3-9; 12:7-14]. Counsel for the Company argued at hearing that the Company also "evaluated whether there were economically justified [DR] programs for the Company that they could implement at this time to reduce winter peak." [Tr. 15:6-9]. The Company identified two programs, TOU rates and critical peak pricing for residential and commercial customers, but decided not to propose any DR programs to reduce winter peak, claiming AMI is required to make them cost-justified. [Raftery, Dir. 11:10-17; Tr. 15:13-22].

Witness Raftery provided testimony about the multi-year program the Company is rolling out to install AMI. [Raftery Reb., 42:1-11]. Witness Raftery testified that AMI-based programs cannot be rolled out piecemeal because of technology limitations. [Raftery Reb., 7:1-2]. Witness Raftery testified that residential and commercial DR programs the Company claims are dependent on AMI "will need to wait until a sufficient saturation of AMI technology is achieved in a market." [Raftery Reb., 7:6-8]. However, the Company does not provide insight into nor does it seem to know how it defines "sufficient saturation" or when it anticipates it will be achieved beyond "it's probably in the two-to-four year time period." [Tr., 76:15-77:22]. The proposed rollout does not but should include provisions related to the need for the early DR action to address winter peak as this Commission has ordered, and as Witness Chant recommends. [Chant Dir., 39:3-5]. The ICF Study contains no mention of exploration of an

AMI pilot program or work with third-party vendors "to spark innovation in DR models that are not reliant on AMI." [Chant Dir., 39:1-16].

### 3. It does not appear that the Company even took the initial step of estimating the amount of winter peak reduction needed to comply with Commission's Order

Although the Company did not, Witness Chant did present evidence that may shed light on the magnitude of winter peak reduction that might materially reduce existing and projected winter peak: In Dkt. No 2019-184-E, Company Witness Lynch testified that "[t]he summer peak forecast and the winter peak forecast are close…[t]his difference could easily reverse ***with a small change in customer load characteristics***. For example, if the residential class contributes 3.410 kW per customer instead of 3.310 kW, the summer forecast would increase by about 65 MW while if the winter contribution decreased from 3.973 kW per customer to 3.873 kW, the winter demand would decrease by about 65 MW. ***Under these circumstances, the summer peak demand would be larger than the winter peak demand***."[22] (emphasis added) [Chant Dir., 34:10-21].

Witness Raftery testified that the current proposal, which is based on the ICF Study, produces demand reduction of 115.5 MW,[23] which "quantifies the level of winter peak impacts." [Raftery Reb., 3:21-23; Chant Dir., 35:10-13]. It does not appear, however, that the Company even took the initial step of estimating the winter peak reduction needed to comply with the Commission's Order. As Witness Chant testified, "[o]ne purpose of [EE] and [DR] programs is to manage costly peaks like the [Company] peak addressed in the Order. The per-customer winter peak demand reduction Witness Lynch mentions…is only about 2.5 percent. Well-

[22] Dkt. No. 2018-184-E, Lynch Direct Testimony, at 16:5; 8-14.
[23] ICF Study, at 53.

designed and targeted EE and DR programs can achieve those savings, thereby helping the utility lower its overall costs to customers." [Chant Dir., 35:1-9].

The Commission agrees with Witness Chant that it is unclear from the Company's filings and testimony whether the 115.5 MW of demand reduction proposed in the ICF Study would result in reduction of the same amount from the baseline discussed by Company Witness Lynch in Dkt. No. 2018-184-E. [Chant Dir., 35:15-22]. The Commission also agrees with Witness Chant that for the Commission to reach that conclusion, the Company "would need to provide more detailed explanations of the winter and summer peak reductions from the EE programs they are proposing in order to see how the projected savings in demand relate to the savings necessary to reverse the winter peak." [Chant Dir., 35:15-22].

The Commission agrees with Witness Chant that winter peak concerns are not sufficiently addressed by merely replacing strip heat with heat pumps, and that ideally, "HVAC equipment replacement is completed in combination with comprehensive air-sealing (shell and ducts) and insulation." [Chant Dir., 36:16-21] Witness Chant testified that further expansion of the Company's Heating and Cooling Program could help meet the winter peaking directive from this Commission and provides specific expansion recommendations to achieve that. [Chant Dir., 37:1-15]. Finally, the Commission agrees with Witness Chant that without regard to AMI rollout, other cost-effective measures are available for implementation sooner than 2024 (examples from neighboring utilities are outlined in her testimony) and should be explored but have not been to help reduce winter peak. [Chant Dir., 37:16-39:16].

Based on the insufficiency of the evidence, the Company's non-compelling argument that the ICF Study should be evidence of compliance [Tr., 74:16-75:16], and the Company's admission that it has no plans to implement any new DR programs over the five-year period, the

Commission declines to find that the Company has complied with Order No. 2018-322(A) with regard to winter peak reduction programming.

h. **The Company must take into account the recommendations from Witness Chant's testimony and late-filed exhibit, discuss and reach consensus with the Advisory Group, and propose program portfolio revisions (programs) for PSC approval in a filing no later than June 30, 2020.**

The Energy Efficiency Advisory Group was convened pursuant to Order No. 2010-472 and includes the ORS, the South Carolina Coastal Conservation League, the Southern Alliance for Clean Energy, and other stakeholder representatives. Although the extent to which "extensive collaboration" has truly taken place in the past within the Advisory Group – especially with regard to vetting of the ICF Study, the Commission finds that this is an appropriate forum for consideration of Witness Chant's recommendations, consensus-building, and program portfolio revision proposals to be developed and presented to the Commission for approval in a filing no later than June 30, 2020.

**IT IS THEREFORE ORDERED THAT**

1. Before proposing its next series of DSM/EE programs, DESC shall include in its next potential study analysis of technical potential; economic potential; and maximum achievable potential

2. DESC shall adopt the shared savings incentive sliding scale structure with low-income and winter peak multipliers, using total sales (including opt outs) as the appropriate denominator recommended by Witness Chant

3. DESC shall take into account the recommendations from Witness Chant's testimony and late-filed exhibit, discuss and reach consensus with the Advisory Group, and propose program portfolio revisions (programs) for PSC approval in a filing no later than June 30, 2020.

STATE OF SOUTH CAROLINA

BEFORE THE PUBLIC SERVICE COMMISSION

DOCKET NO. 2019-239-E

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| In re: Dominion Energy South Carolina, Incorporated's Request for Approval of an Expanded Portfolio of Demand Side Management Programs, and a Modified Demand Side Management Rate Rider | ) ) ) ) ) ) ) | CERTIFICATE OF SERVICE |

I certify that the following persons have been served with one (1) copy of the Proposed Order by electronic mail and/or U.S. First Class Mail at the addresses set forth below:

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This 4th day of December, 2019

/s/ A. Rachel Pruzin